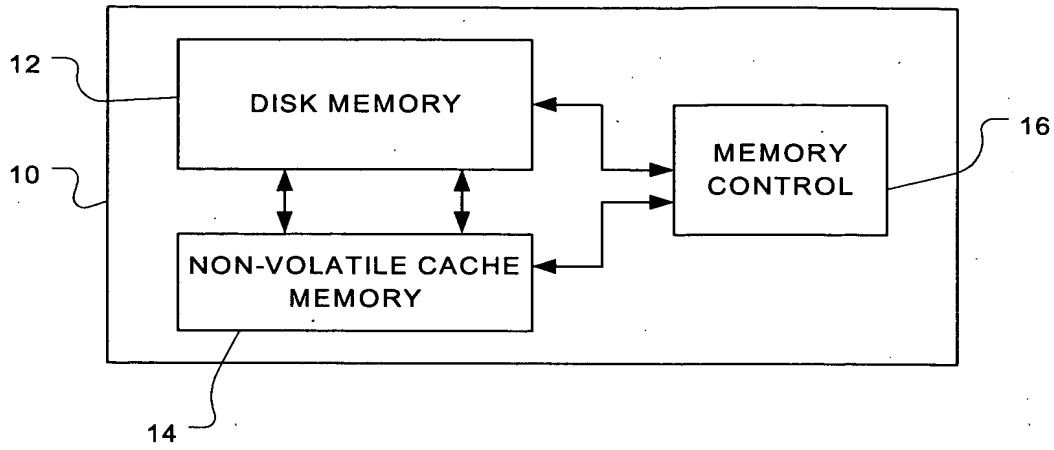
FIGURE 1



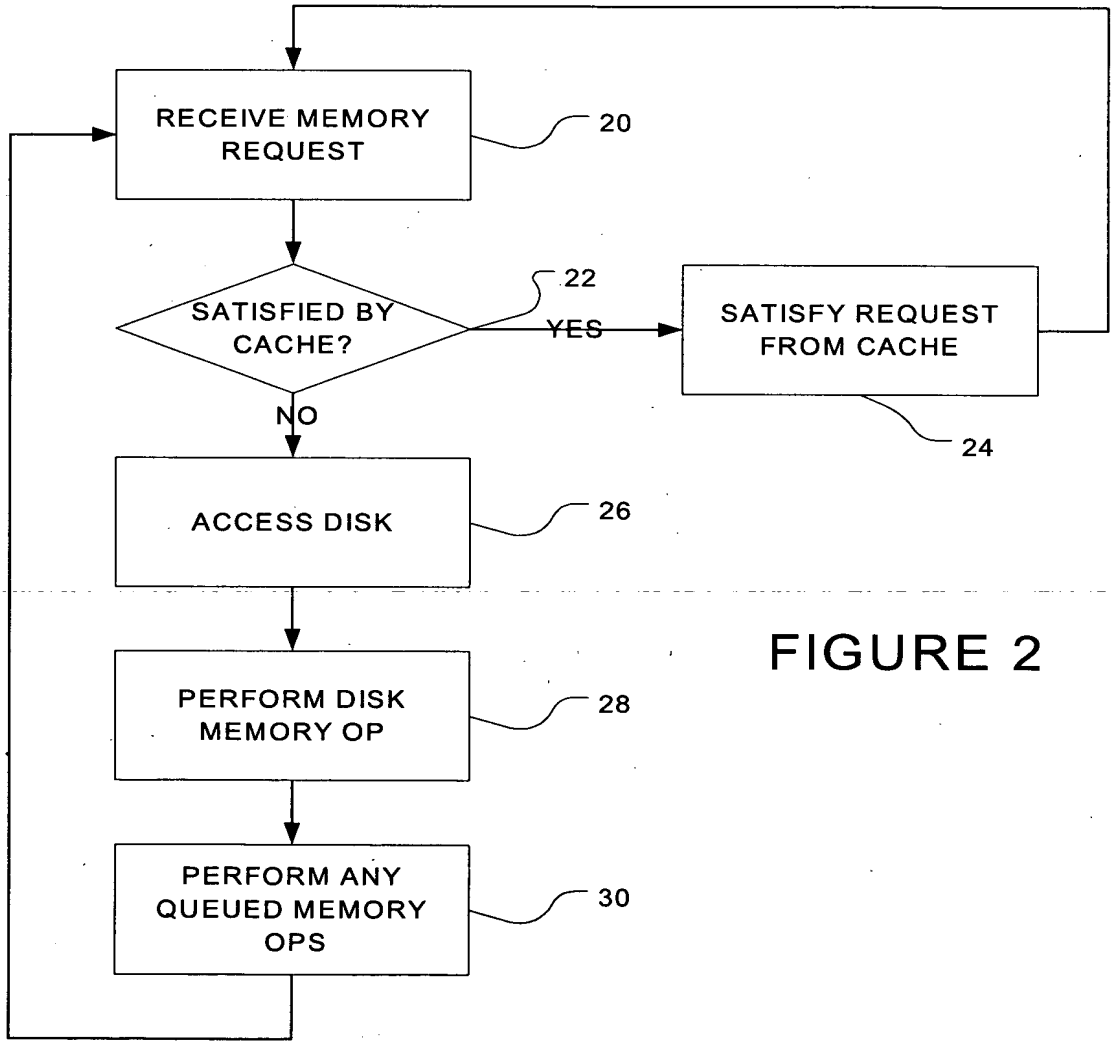


FIGURE 2

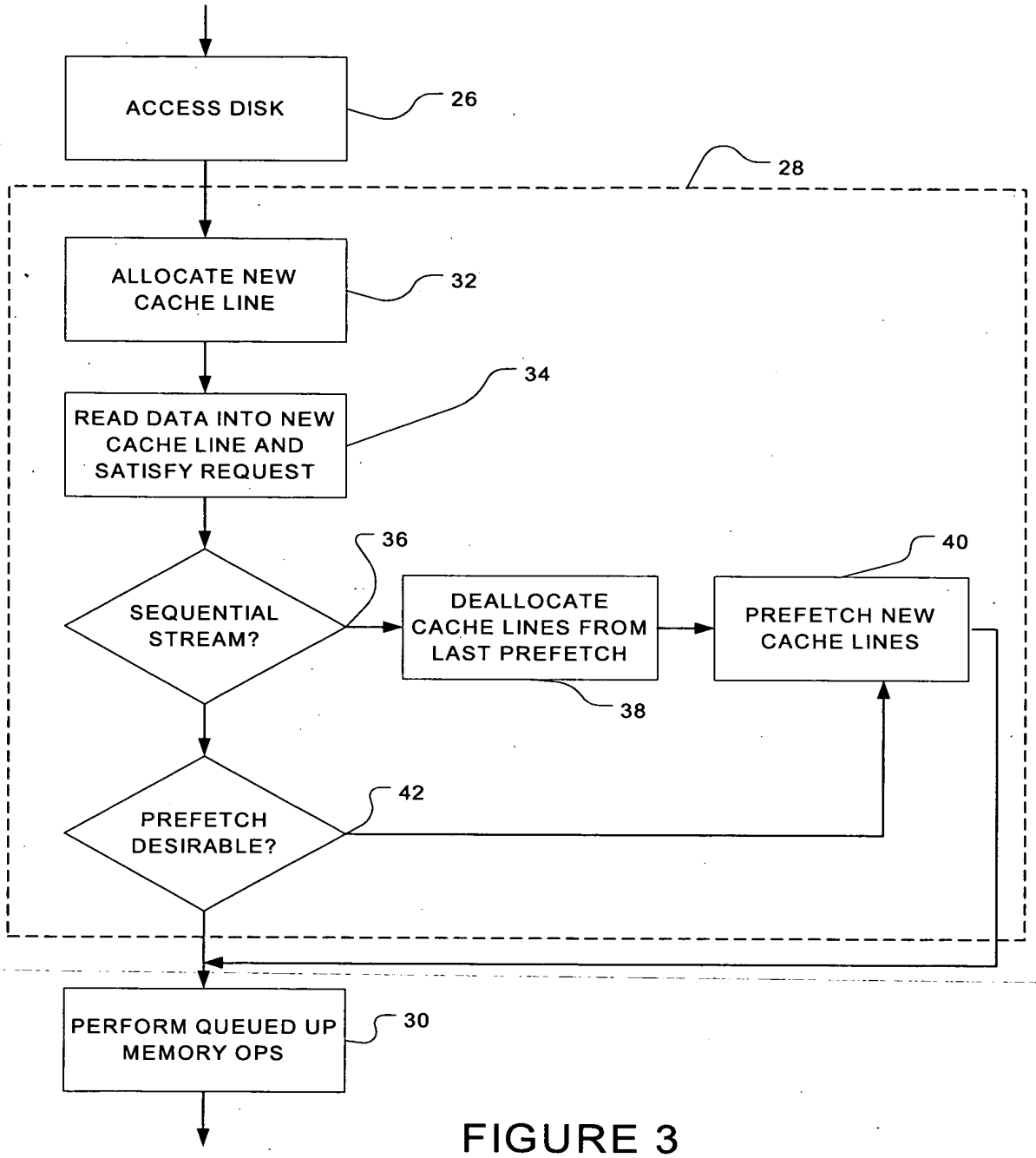

ACCESS DISK
26
28
ALLOCATE NEW CACHE LINE
32
READ DATA INTO NEW CACHE LINE AND SATISFY REQUEST
34
SEQUENTIAL STREAM?
36
DEALLOCATE CACHE LINES FROM LAST PREFETCH
38
PREFETCH NEW CACHE LINES
40
PREFETCH DESIRABLE?
42
PERFORM QUEUED UP MEMORY OPS
30

FIGURE 3

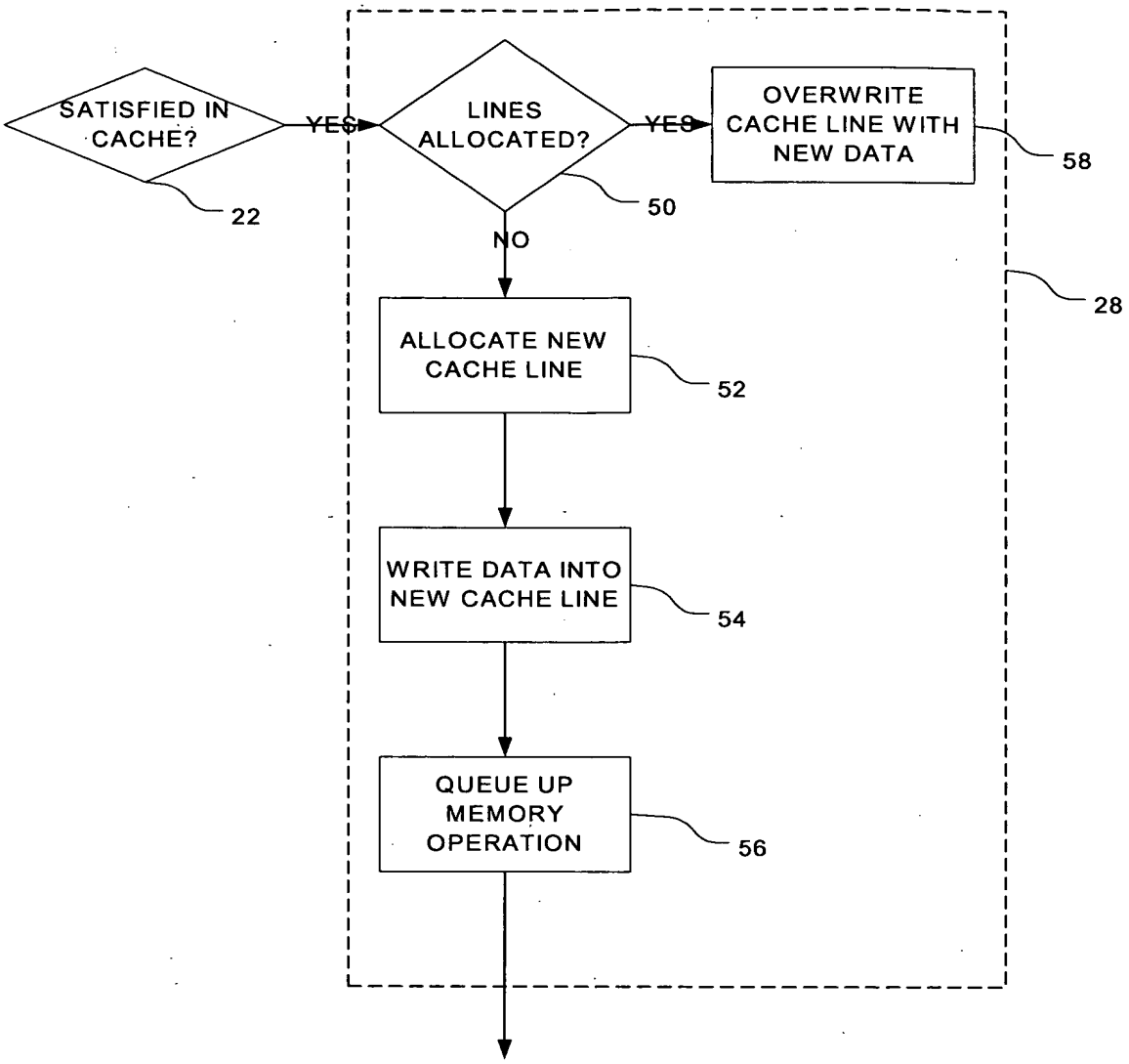

SATISFIED IN CACHE?
YES
LINES ALLOCATED?
YES
OVERWRITE CACHE LINE WITH NEW DATA
58
22
50
NO
28
ALLOCATE NEW CACHE LINE
52
WRITE DATA INTO NEW CACHE LINE
54
QUEUE UP MEMORY OPERATION
56

FIGURE 4